PIPE MOUNTING THERMOSTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for the measurement of pressure and temperature.



Applications

- Process technology
- Water treatment

Features

- For pipe or barrel mounting
- Short response time
- Protection IP54
- Electrical connection on terminal screw

01/2015
Data sheet H72175d
Subject to change

Technical Data			
Designation of application	Pipe mounting thermostat	Switching differential	Adjustable / not adjustable
Measuring range	-10 ... +35 to +20 ... +110°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval	EN60730-1/ EN60730-2-9: Typ 2.B.H

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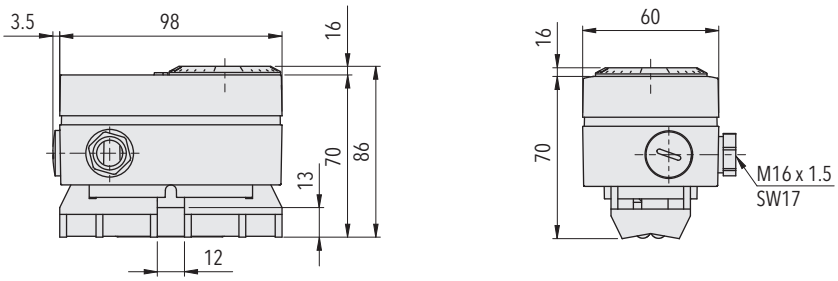
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sensors controls

Ordering information/type code

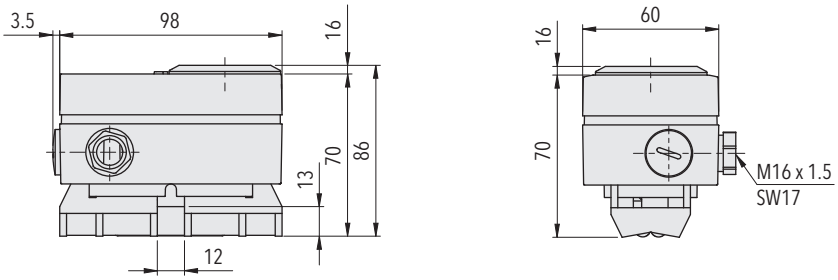
			XXX	XX	XX	XXX	XX	XX
Custom build code	External adjustment		**663**					
	Internal adjustment		**664**					
Microswitch	Small switching differential, not adjustable			**10**				
	Average switching differential, not adjustable			**11**				
	Adjustable standard switching differential			**25**				
Range	**Range [°C]**	**Sensor max. [°C]**						
	-10 ... 35	50			**94**			
	-10 ... 80	85			**95**			
	0 ... 45	85			**93**			
	10 ... 55	85			**22**			
	5 ... 95	105			**20**			
	20 ... 110	115			**23**			
Sensor	Copper					**502**		
	Copper nickel plated					**503**		
Fixing	Standard with strap						**00**	
Accessories	Set blocking							**15**
	Condensator over Pin 1-2							**12**
	Condensator over Pin 1-3							**13**
	Condensators over Pin 1-2 / 1-3							**23**
	Outdoor usage (aerated)							**44**
	Cover with window							**77**

Standard products (extra short lead time)				
Product No.	**Type Code**	**Temperature range [°C]**	**Switching differential [°C]**	**Sensor max. [°C]**
MSP35	664 2594 502 00	-10 ... +35	3.7 ... 14 (einstellbar)	50
MSP80	664 2595 502 00	-10 ... +80	3.7 ... 14 (einstellbar)	85
MSP95	664 2520 502 00	+5 ... +95	3.7 ... 14 (einstellbar)	105
MSP110	664 2523 502 00	+20 ... +110	3.7 ... 14 (einstellbar)	115

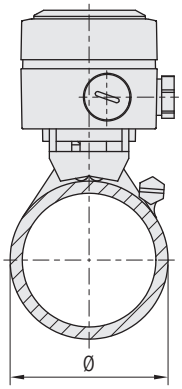
Dimensions



663.XXXX.XXX.XX.XX



664.XXXX.XXX.XX.XX



The supplied strap (500mm) is sufficient for double winding upto pipe diameter of 65mm (2"), single winding upto pipe diameter 160mm.
Determination of strap length:
Strap length [mm]
= 180 [mm] + 5 x $ø_{Pipe}$ [mm] (twice wound)

Specifications

Accuracy	Repeatability	± 0.5 % FS typ.
	Scale accuracy typ.	± 2 % FS typ.
	Switching differential	Microswitch 10 (not adjustable): 2.5oC 11 (not adjustable): 3.7oC 25 (adjustable): 3.7...14oC
	Switching point	Temperature compensated with bimetal switch lever
Environmental conditions	Ambient temperature	-30 ... +70°C (important: Temperature at sensor may not exceed maximum sensor temperature)
	Storage temperature	Range ≤ +45°C: -30...+50°C Range > +45°C: -30...+85°C
	Protection	IP54
	Humidity	Max. 95 % relative
Mechanical Data	Sensor housing	See ordering information
	Filling	Liquid
	Housing	PC/ABS-Blend V0
	Screwed cable gland	PA, Polyamid
	Installation	Any position
	Weight	~ 220 g
Microswitch	Rating	See table
	Resistance of insulation	> 2 MΩ
	Dielectric strength	U ≤ 250V: 1.45 kV U ≤ 500V: 2 kV terminal ground
	Life time (mechanical)	20 Mio. cycles
Electrical connection	Cable gland	M16x1.5 Cable-Ø 4...9 mm
	Terminal screw	3 x 1...2.5 mm²

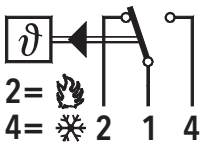
Additional information

Documents	Data sheet	www.trafag.com/H72175
	Instructions	www.trafag.com/H73663
	Flyer	www.trafag.com/H70958

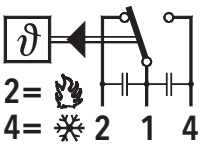
Electrical data switch

		Rating Resistive Load (Inductive Load)	
Type	**Features**	**AC**	**DC**
10	Small switching differential, not adjustable	125 V, 10 (1.5) A 250 V, 10 (1.25) A	250 V, 0.2 (0.02) A 125 V, 0.4 (0.03) A 30 V, 2 (1) A 14 V, 15 (2.5) A
11	Average switching differential, not adjustable	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.25(0.03) A 125 V, 0.5(0.05) A 30 V, 6 (1.5) A 14 V, 15 (1.5) A
25	Adjustable standard switching differential	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.25(0.03) A 125 V, 0.5(0.05) A 30 V, 6 (1.5) A 14 V, 15 (2.5) A

Electrical Connection



663/664



with accessory **23**